Work Practices to Curb Attrition in the Indian Hi-Tech Software Development Industry: A Structurational Analysis

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ABSTRACT

Whilst collaborative knowledge work is gaining momentum across national borders, there are a number of issues associated with management of human resources creating this knowledge. This is especially relevant where IT professionals learn to apply present and prior work contexts together over ICT tools. But the tenure of IT professionals is often limited, leading to loss of specialist skills and continuity of knowledge flow. Indian firms have recognised the importance of human capital as a vital knowledge resource and are making efforts to reduce attrition. This paper sheds light on how hi-tech software firms overcome the challenges associated with the high attrition of IT professionals, and provides new insights on emerging practices for retaining and motivating the agents. Findings reveal that agents have the power to bring about transformation in organisational practices. New organisational routines for retaining professionals have been implemented to motivate professionals and capture contextual knowledge into project repositories. This reduces dependency of IT firms on individuals. The study illustrates empirically the dualism between IT professionals and organisational work structures for enabling each other in knowledge industries.

Keywords: Attrition, Collaborative Knowledge, Human Resources, Knowledge Management, Organisational Practices, Structuration Theory

INTRODUCTION

The ‘flat’ world concept has emerged for global knowledge work, in which developing and developed economies are collaborating together for knowledge creation (Friedman, 2006). While collaborative knowledge work gains momentum across national borders, there are a number of issues associated with management of human resources who create this knowledge. This is especially relevant in software development, where IT professionals learn to apply present and prior work contexts together, over ICT tools, to create new knowledge and develop interrelated software artefacts (Hinds & Weisband, 2003). Over time, these professionals mature as they gain appreciation of the project needs and their local work contexts. However,
IT professionals have been known to have the highest employee turnover rates (Garcia-Crespo, Colomo-Palacios, & Miguel-Gomez, 2008). When experienced IT professionals leave projects mid-way, the projects are handed over to new individuals who lack the contextual knowledge for making shared decisions. Clients are cautioned about collaborating via off-shoring of software development projects, to firms who have very high employee turnover. Specifically, clients are cautioned about software firms in India, which are known for high staff turnover (Dibbern, Winkler, & Heinz, 2008). Farrell (2006) recommends to western countries that although India is a hot spot as a software development location with its skilled pool of IT professionals, the choice of outsourcing destination must be expanded to other less “overheated labour markets” (p. 92).

Indian software exporters presently lead the global outsourcing market (Friedman 2006; Kearney 2004; Moore & Martorelli, 2004), especially in software development (Eppinger & Chitkara, 2006), but the problem of attrition cannot be any longer ignored. There are many negative perceptions associated with staff turnover in IT firms. Research shows that attrition rates in Indian IT facilities have jumped to 25–30% in 2004 (Moore & Martorelli, 2004) and this trend continues to rise. This means that the tenure of IT professionals is often limited, leading to loss of specialist skills and continuity of knowledge flow when professionals frequently leave the organisation. This often leads to project overruns and delayed deliveries.

To maintain position as a leader in the software industry, Indian firms have recognised the importance of human capital as a vital knowledge resource and are making efforts to reduce attrition. In this paper, we examine five hi-tech firms to answer the research question: how do hi-tech Indian software organisations manage IT professionals to realise a satisfied workforce and reduce the impact of staff turnover on their global work commitments? The paper utilises Giddens structuration theory to analyse the dualism of recursive interaction between IT professionals (agents) and organisational work practices (structures) for answering the research question. Structuration theory (ST) has been widely used in knowledge management studies in different application domains (Jones & Karsten, 2008).

The next section reviews prior theory on how IT professionals are motivated in emerging hi-tech software firms. Giddens structuration theory characterised as a ‘hermeneutically informed social theory’ (Loyal, 2003, p. 29) has been explained next in the context of this study. Findings from empirical case studies of five hi-tech Indian software organisations are then presented. An analysis of how the organisational work space is influenced by agents (IT professionals and management), is conducted next using the structurational lens. This study sheds light on how hi-tech software organisations (agencies) overcome the challenges associated with the high attrition of IT professionals (agents), and provides new insights on emerging practices (structures) for retaining and motivating the agents. The paper concludes with discussion, implications and future research directions.

THEORETICAL BACKGROUND

Since knowledge is innately human, organisational culture theories have dominated the knowledge-based concepts to identify individual (personal) and collective (shared) domains, resulting in two dimensions of knowledge, namely tacit and explicit knowledge (Baskerville & Dulipovici, 2006). Most of the operational knowledge in organisations exists at the tacit level, which is embedded in personal skills of agents who execute them without “conscious awareness”. Explicit knowledge is “rule based when the knowledge is codified into rules, instructions, specifications, standards, methodologies, classification systems, formulas, and so on” (Choo, 2006, p. 141).

Leornardi and Bailey (2008) define another aspect of knowledge in software development called implicit knowledge, which lies between explicit and tacit knowledge. This is with the
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